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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/464,867	12/16/1999	WAYNE M. SCHOTT	PHA-23.820	8191
24737	7590	01/20/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			HARVEY. DIONNE	
P.O. BOX 3001				
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER
			2643	13
DATE MAILED: 01/20/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. <b>09/464,867</b>	Applicant(s) <b>Schott</b>
Examiner <b>Dionne Harvey</b>	Art Unit <b>2643</b>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on \_\_\_\_\_.

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 1-20 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-20 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892)

4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

6)  Other: \_\_\_\_\_

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## DETAILED ACTION

### *Specification*

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 U.S.C. § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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1. Claims 1-11, 13-16, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Tamura (JP 4-301998).

*Regarding claims 1,2,6,7,11 and 16,*

Tamura teaches a loudspeaker comprising an enclosure(1); transducer(3); internal vent i.e., first means(6); first external vent i.e., second means(7) and second external vent i.e., third means(8); the ratio of the acoustic mass of the internal vent to the second external vent being *approximately* 3/1 to 7/1, as broadly claimed; and the ratio of the acoustic mass of the first external vent to the second external vent being *approximately* 15/1 to 30/1, as broadly claimed.

*Regarding claims 3, 8, 13 and 18,*

Tamura teaches that the ratio of the first subchamber to the second subchamber is in a range of *approximately* 0.3 to 2.5, as broadly claimed.

*Regarding claims 4,5,9,10,14,15,19 and 20,*

Tamura teaches that the cone(3) has a front surface in communication with a first subchamber(4) and rear surface in communication with the second subchamber(5).

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura (JP 4-301998) in view of Bobisuthi (US 5,729,605).

*Regarding claims 1,2,6,7,11 and 16,*

Tamura teaches a loudspeaker comprising an enclosure(1); transducer(3); internal vent/first means(6); first external vent/second means(7) and second external vent/third means(8). Tamura fails to specifically teach that the ratio of the acoustic mass of the internal vent to the second external vent is 3/1 to 7/1, or that the ratio of the acoustic mass of the first external vent to the second external vent is 15/1 to 30/1.

Bobisuthi teaches a speaker and enclosure wherein the ratios of the acoustic masses are variable (see column 4, ln 66 - column 5, wherein Bobisuthi teaches that the size, shape, number and location of openings within the acoustic chamber are variable; also see figures 4b-4e). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Tamura and Bobisuthi, providing vents having adjustable "acoustic masses" so as to achieve a desired frequency response for the loudspeaker system.

*Regarding claims 3, 8, 13 and 18,*

Tamura fails to specifically teach that the ratio of the first subchamber to the second subchamber is in a range of 0.3 to 2.5. In column 2, line 40 - column 3, Bobisuthi teaches an acoustic chamber constructed so as to be volume adjustable, thereby increasing or decreasing its' interior volume and thus effecting the compliance and low frequency response of the system. It therefore

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would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Tamura and Bobisuthi, providing chambers having adjustable "acoustic masses" so as to achieve a desired frequency response for the loudspeaker system.

*Regarding claims 4,5,9,10,14,15,19 and 20,*

Tamura teaches that the cone(3) has a front surface in communication with a first subchamber(4) and rear surface in communication with the second subchamber(5).

*Regarding claims 12 and 17,*

The combination of Tamura and Bobisuthi teaches that the first, second and third means may comprise respective first, second and third acoustic masses.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakamura (4,027,116) teaches a headphone with adjustable port openings.

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Moen (3,876,846) teaches a microphone with adjustable port openings.

Macaluso (6,160,896) teaches a microphone with adjustable port openings.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statements for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111. The examiner can normally be reached on Monday through Friday from 8:30am to 6:00pm.

**Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, DC 20231

**,or faxed to:**

(703) 308-6306, for formal communications for entry

**Or:**

(703) 308-6296, for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor(Receptionist)

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111.

D.H.

January 7, 2004



CURTIS KUNTZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600